

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Initially, applicants and applicants' representative wish to thank Examiner Nguyen for the interview granted applicants' representative on October 26, 2004. During the interview the outstanding rejections were discussed in detail. Further, during the interview clarifications of claim features were discussed to clarify the claims over the applied art. The present response sets forth the discussed clarified claims. Examiner Nguyen indicated he would further consider such amended claims when formally presented in a filed response.

The specification is amended by the present response to correct minor informalities. The changes made to the specification are deemed to be self-evident from the original disclosure, and thus are not deemed to raise any issues of new matter.

Substitute Figures 2 and 3 are submitted herein in which each of the boxes in those figures includes a corresponding legend. The substitute drawings are not believed to raise any issues of new matter.

Claims 10-19 are pending in this application. Claims 1-9 are canceled by the present response without prejudice and new claims 10-19 are submitted in the present response. Claim 9 was objected to under 37 C.F.R. §1.75(c). Claims 1 and 2 were rejected under 35 U.S.C. §102(e) as anticipated by U.S. patent 6,615,024 B1 to Boros et al. (herein "Boros"). Claims 3-8 were objected to as dependent upon a rejected base claim, but were noted as allowable if rewritten in independent form to include all of the limitations of their base claim and any intervening claims.

Initially, applicants gratefully acknowledge the early indication of the allowable subject matter in claims 3-8.

Addressing first the objection to claim 9, that objection is obviated by the present response as claim 9 is canceled by the present response and as no other multiple dependent claim is submitted.

Addressing now the objection to claims 3-8, applicants note new claims 12-19 correspond substantially in scope to previously pending claims 3-8, with new claims 12 and 16 rewritten in independent form. That is, new claims 12-19 set forth the subject matter from previously pending claims 3-8 indicated as allowable. Thus, applicants submit new claims 12-19 are allowable.

Addressing now the rejection of claims 1 and 2 under 35 U.S.C. §102(e) as anticipated by Boros, that rejection is traversed by the present response.

New claims 10 and 11 are similar in scope to previously pending claims 1 and 2, but those claims are believed to distinguish over the applied art. New independent claim 10 is written to clarify the operation therein by reciting "making an initial estimation of the downlink channel at a first instant". New independent claim 10 further recites "deducing, from variations in the estimated uplink channel, variations in the downlink channel" and "estimating at a second instant the downlink channel from the initial estimation at the first instant and the deduced variations in the downlink channel between the first and second instants".

According to the above-noted features set forth in new independent claim 10, a downlink channel can be estimated at first and second different instants, i.e. at two different times. However, the estimation of the downlink channel at the second instant is based on the estimation of the downlink channel at the first instant, and a deduced variation in the downlink channel between the first instant and the second instant. As a non-limiting example, and as set forth in dependent claim 11, the initial estimation of the downlink channel can be obtained by the mobile terminal and can be transmitted by the mobile terminal

to the base station. However, such an operation is not required with respect to the second estimation of the downlink channel in Claims 10-11. In claim 10, that second estimation of the downlink channel utilizes the first estimation of the downlink channel and deduced variations in the downlink channel from variations in the uplink channel. With such an operation in claims 10 and 11, an estimation of downlink channels need not be transmitted from a mobile terminal to a base station at each instant.

The claimed features are believed to distinguish over Boros.

Boros discloses an operation in which uplink and downlink signatures are determined and a downlink weight vector is determined utilizing the uplink signature and an uplink weight vector.¹

However, applicants respectfully submit such teachings in Boros do not correspond to the features set forth in new independent claim 10. Specifically, such features in Boros do not make an initial estimation of a downlink channel at a first instant, and then estimate at a second instant the downlink channel from that initial estimation and variations between the first and second instants, those variations being deduced from variations in an estimated uplink channel.

In such ways, applicants respectfully submit independent claim 10, and claim 11 dependent therefrom, patentably distinguishes over Boros.

¹ See for example Boros at column 33, line 42 to column 34, line 12 and column 35, line 60 to column 36, line 26.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 2 and 3. These sheets, which include Fig. 2 and 3, replace the original sheets including Figs. 2 and 3.

Attachment: Replacement Sheets